

# (Design and Implementation of Web-based Internet Applications Traffic Extraction and Management System)

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300

: 0331-290-7212

: 0331-290-7211

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가

가

가

가 가

가

1.

가 .[1][2]

가

가

가

.[5]

(1)

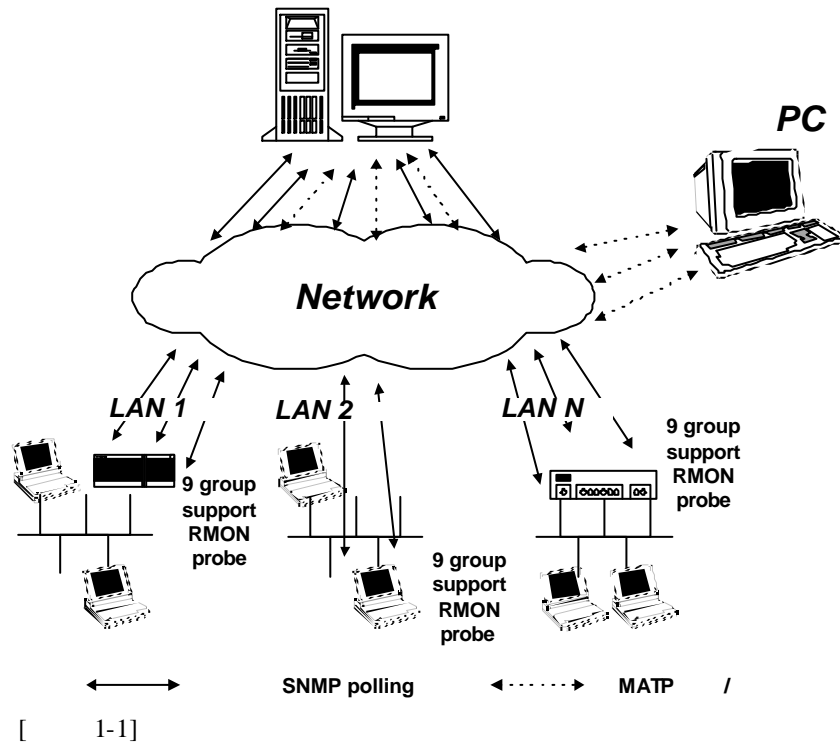
RMON(Remote Monitoring Network) probe  
probe

LAN

가

.[3][4]

가  
 RMON probe LAN  
 [6],  
 [7] HTML(HyperText Markup  
 Language)  
 (2) HTML  
 CGI(Common Gateway Interface)가  
 , Web 가 Web 가  
 Email , FTP , Java 가 Java  
 HTML 가  
 Web Java  
 가  
 가 [8][10]  
 [8][9] [ 1-1]  
 가



2.

(1) Statistics  
 RMON probe

RMON probe LAN  
 RMON probe LAN  
 4 MIB

(2) Filter

가 MIB  
 9 MIB  
 9 MIB RMON

probe

2.1

RMON MIB

[ 2-1] 9 RMON MIB 가 가

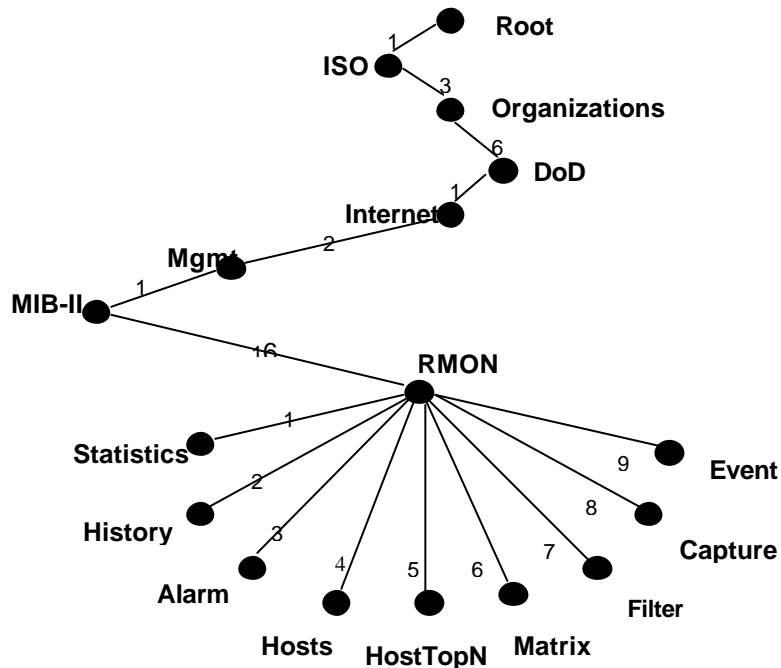
3 가 MIB (3) Capture

MIB

probe

가

3 가 RMON MIB . [11][12][13][14]



[ 2-1] RMON MIB tree

2.2

(1) LAN

[ 2-2]

3 가 RMON MIB

[ 2-1]

LAN

Ethernet

RMON MIB

[ 2-

1]

3 가 RMON MIB

가

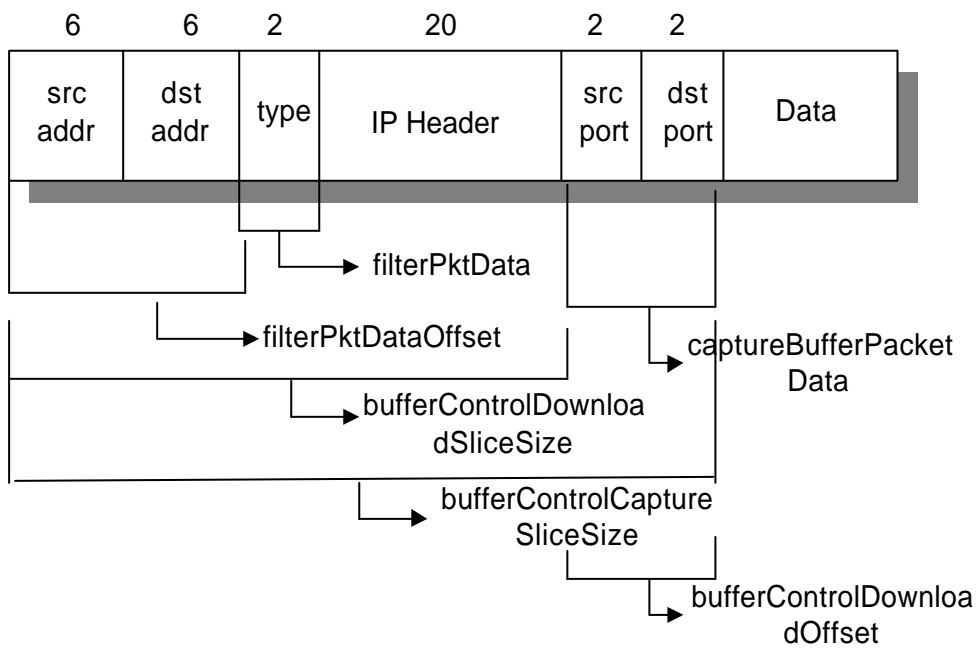
LAN

RMON MIB

filter

[ 2-1]

TCP	TCP SMTP	Telnet, Ftp, HTTP, POP,
UDP	UDP	SNMP, NAME, Route, Bootp
TCP/UDP	LAN TCP UDP	TCP UDP
	LAN	



[ 2-2]

Ethernet

RMON MIB

filter

capture  
가

MIB

Ethernet

RMON MIB  
RMON

capture

RMON

(2)

[ 2-3]

Ethernet

RMON MIB

LAN

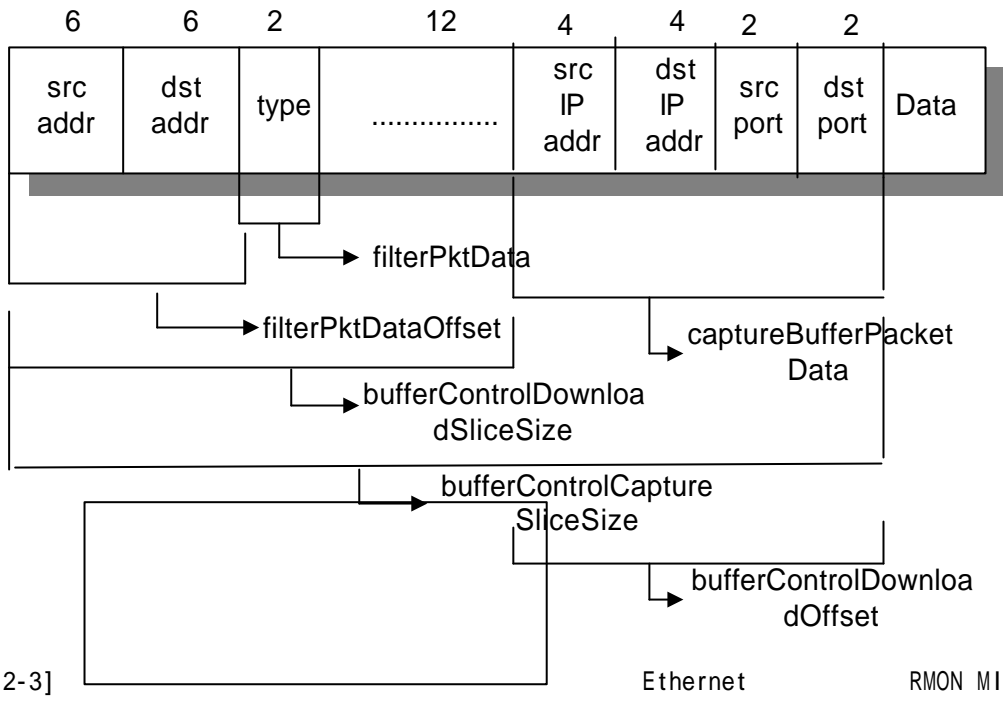


가

= ----- X 100

:  
:  
:

(%)



[ 2-3]

Ethernet

RMON MIB

RMON

capture

2.3

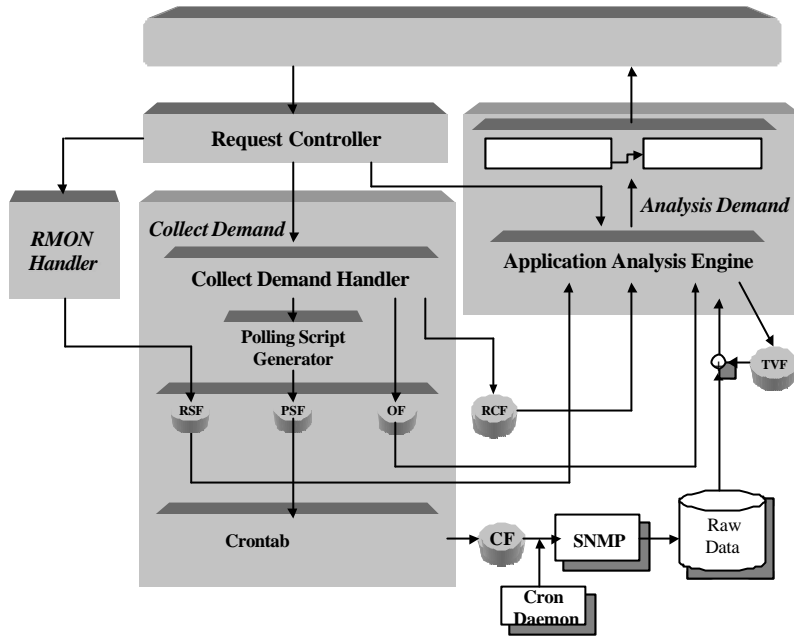
[ 2-4]

LAN

가

$$h = \frac{h}{h} \times 100$$

h :  
 h :  
 h : (%)



[ 2-4]

1)

가 .  
가

OF(Organization File) ,

2)

5) Crontab

Cron

3) RMON

6)

CF(Crontab File)

가 .

RMON

RMON

RMON

RMON

RSF(RMON Set

File)

RMON

[ 2-5]

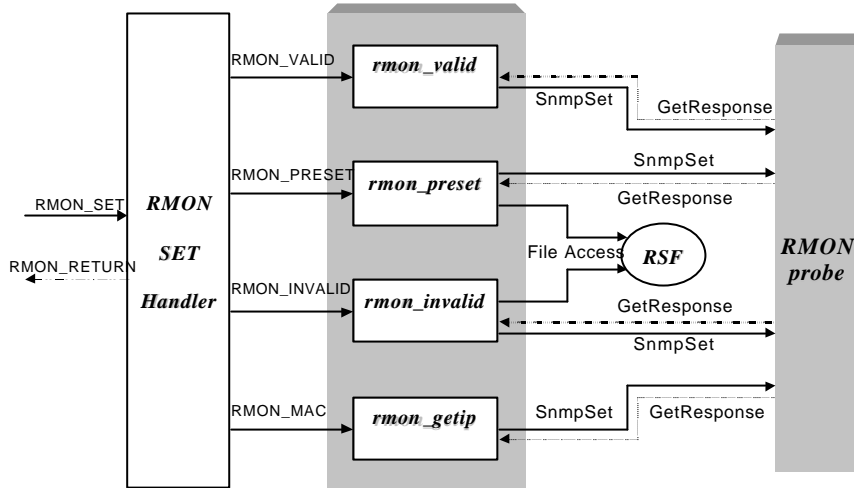
RMON

RMON

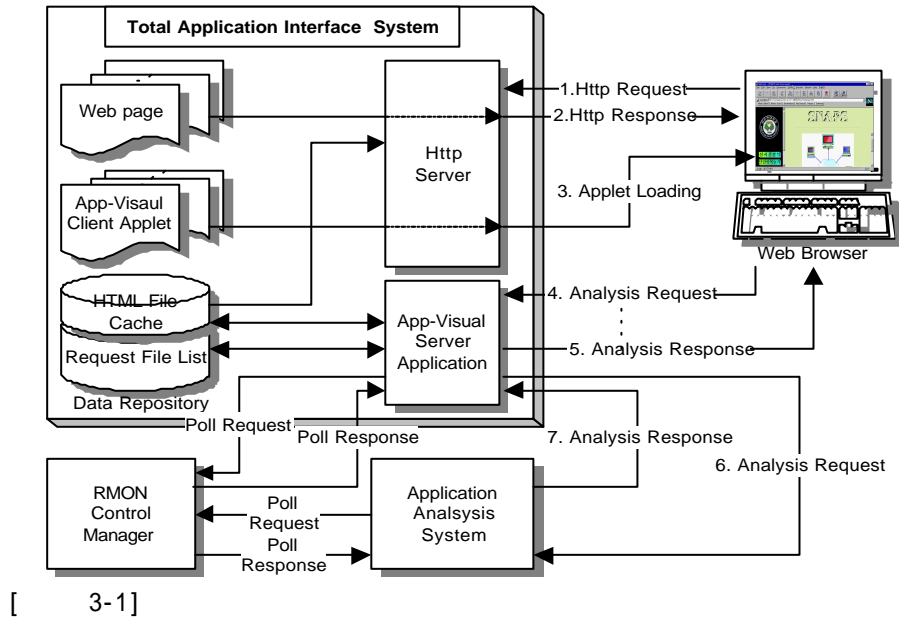
3.

4)

LAN



[ 2-5 ] RMON

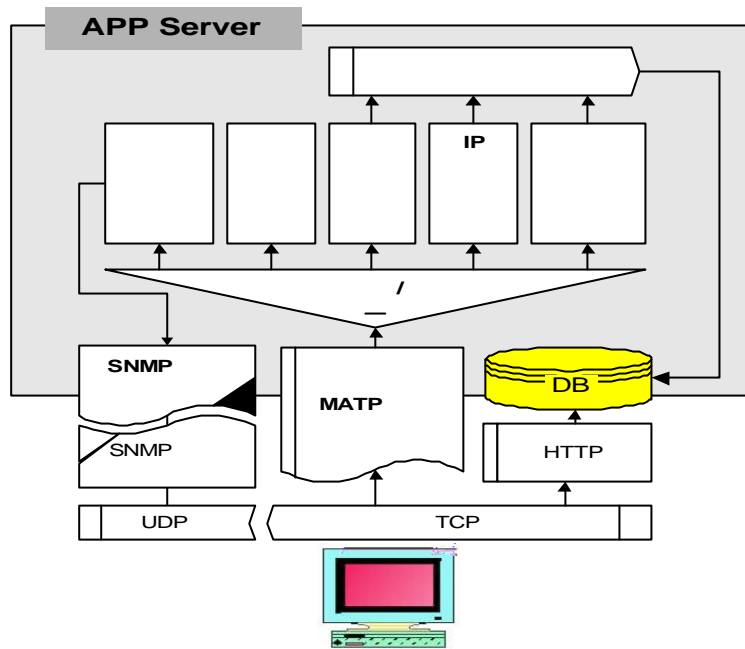


[ 3-1 ]

3.1

HTTP

MATP



[ 3-2]

1)

가

가 ,

[ 3-3]

가

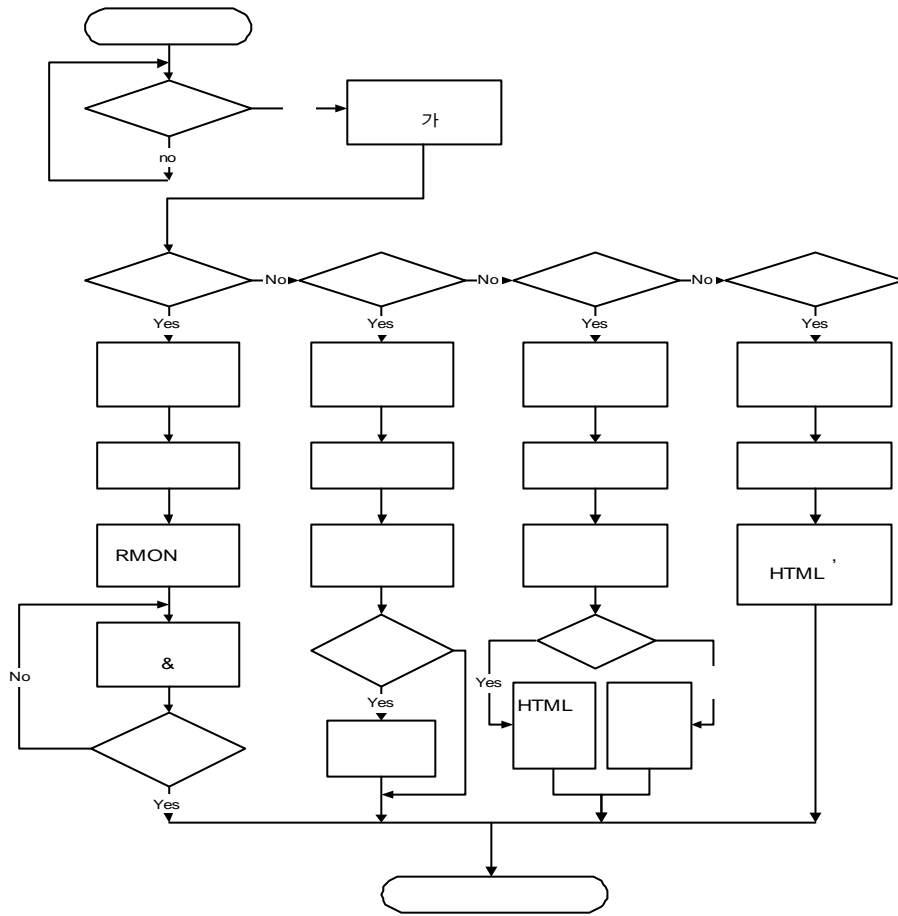
가

2)

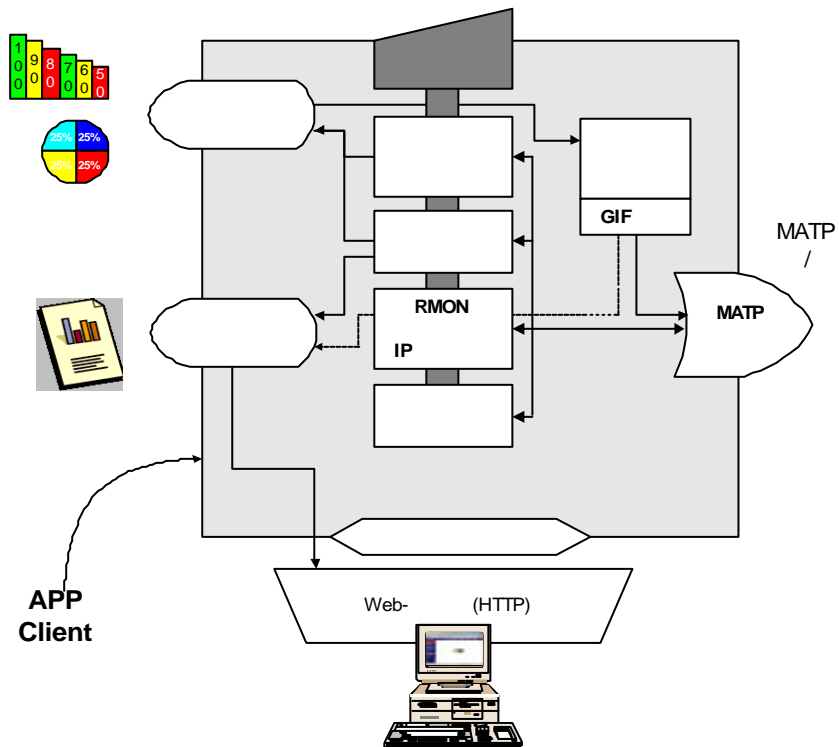
HTML

가 가

3)



[ 3-3]



[ 3-4]

가 , 가

3.2

[ 3-4]

3)

1)

LAN

TCP/UDP

[ 3-5]

[ 3-5]

LAN

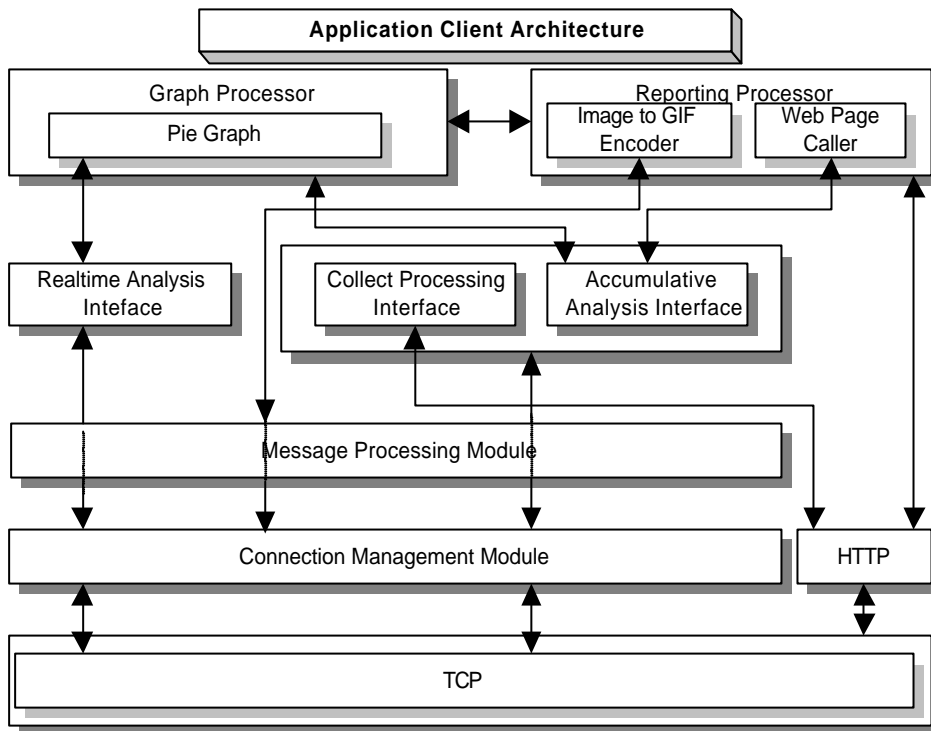
TCP  
Management Module)

(Connection

2)

ReportingProcessor

GraphProcessor,



[ 3-5]

3.3

[10]

MATP(Management Application Transfer Protocol)

[ 3-6]

TCP

[ 3-7]

ACK

TCP

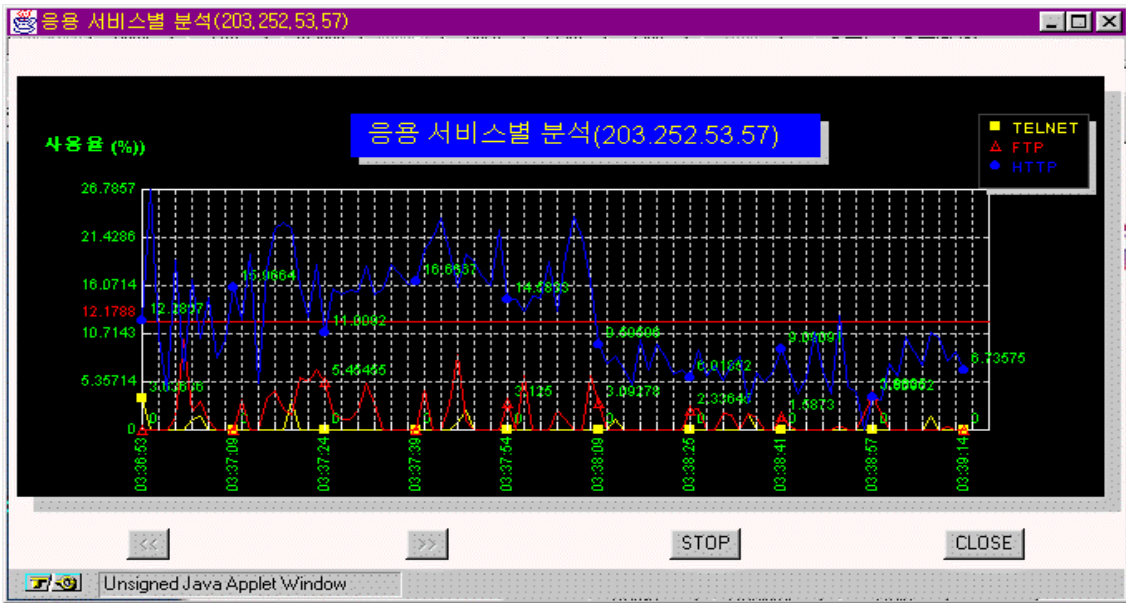
ACK

HTML

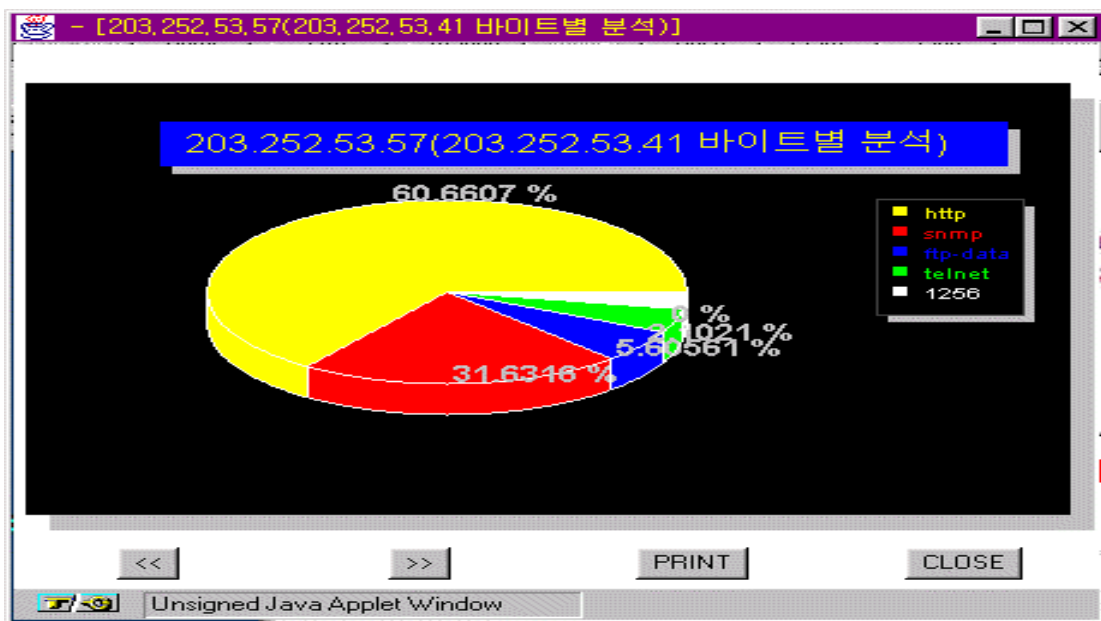
ACK



(4) Solaris 2.5 crontab  
 03:38 03:39 HTTP  
 ( 12%)  
 [ 3-8] FTP ( 3%)  
 LAN 203.252.53.0  
 RMON probe 203.252.53.57  
 TCP



[ 3-8] LAN TCP (telnet,ftp,http)



[ 3-9]

[ 3-9]

[ 3-8] , LAN  
203.252.53.41

60%) HTTP(  
SNMP( 31%), FTP( 5.6%)  
Telnet

4.

RMON  
RMON MIB  
3 가 MIB

가 가

가

[ ]

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1974

1979

1991

1982 ~ 1985

1981 ~ 1982 Racal Milgo Co.

1985 ~

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1988

1997

)

(

1999

, ,

1997.2

1999.2

, ,